Algebra Graduate Student Seminar

The Algebraists and the Analysts Should be Friends

Victoria Powers Emory University

Abstract: In the last 15 years or so connections between questions in real algebraic geometry and functional analysis were discovered and exploited. By working together, algebraists and analysts were able to make progress on important problems in both areas. In this talk we discuss connections between a topic from algebra – the representation of positive polynomials – and two problems from analysis – the classical moment problem and the Bessis-Moussa-Villani conjecture from quantum physics. The talk will be accessible to anyone who knows what polynomials, matrices, and integration are.

Wednesday, October 1, 2008, 4:00 pm Mathematics and Science Center: W303

MATHEMATICS AND COMPUTER SCIENCE EMORY UNIVERSITY